



State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 028
Trenton, NJ 08625-0028
Tel. # 609-633-1408
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Scott A. Weiner
Commissioner

Karl J. Delaney
Director

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. P 713-693-281

29 AUG 1991

Cris Anderson, Director
Environmental Affair
M.A. Hanna Company
1301 E. Ninth St., Suite 3600
Cleveland, OH 44114-1860

Dear Mr. Anderson:

Re: L.E. Carpenter ACO sign 9/26/86
Outstanding RI Issues

The New Jersey Department Environmental Protection and Energy (NJDEPE) the following statements relative to the "RI Acceptance Issues" brought up at our meeting of 8/8/91. These responses are numbered in the same sequences as the meeting handout.

1. Extent of free product migration.

The NJDEP can not determine whether or how far free product has migrated to the area between the Rockaway River and the abandoned sewer line on Wharton Enterprises Property because there is no monitoring well in that area to be sampled. Hence the NJDEPE's request that, (1) at a minimum, one well be installed and (2) free product migration along the abandoned sewer line be investigated.

2. See letter of May 24, 1991 for reasoning concerning ground water contamination. (Attached)

3. a. The Department's stance regarding ground water flow direction on the LEC site is that, although current piezometric measurements indicate a generally easterly groundwater movement, the gradient is so small that the flow direction



could have been directed toward the Rockaway River during times of low water table. At such time (low water table), contamination from the site would have seeped into the river bed. Surface runoff from the site might also be a source of contamination but runoff contamination would be seen mainly on the top sediments and not only on the subsurface ones, as recent sampling indicates. The recent river sediment data is inconclusive and does not allow determination regarding the source of sediment contamination to be made. (See #4 below)

- b. The Department believes that the ditch may be a partially penetrating barrier to ground water flow in the shallow aquifer but geology in the LEC and Air Products properties is complex and a significant number of drilling logs or cores must be analyzed to gain a reasonable understanding of it. The Department is looking forward to reviewing the well logs.
4. The Department is disappointed that the river sediment sampling did not produce definitive results concerning the stratification of contamination in the river bed. The river sediments should have been sampled at several discrete vertical intervals at several riverbed locations in order to allow the determination of the contaminant sources and OF their depths in the river at LEC bed and to determine further the extent of contamination in the river.

Since these determinations cannot be made without additional sampling, the technical feasibility of remediating the sediments must be evaluated in the FS. The FS must consider the overall benefits of remediating the sediments vs the potential adverse effects on river's ecosystem if sediments are disturbed.

5. Background levels of contaminants of concern should be determined after reaching agreement among EPA, DEPE and LE Carpenter. The USGS paper "Trace Metals and Organochlorine Residues in Sediments of Rockaway River" Smith, Harte Hardy 1987, should be referenced and used.
6. Refer to #3.

Other issues not listed.

7. The Department will not require resampling of those location for which "qualified" data resulted, so long as LE Carpenter applies these data, as previously instructed, "with caution". Qualified data must be noted as such when used or referenced in text.
8. All questions regarding use and activity of the domestic wells within a mile of the site must be answered. At this time there is uncertainty about their situations. Also, the requested drilling logs of the wells near the ditch are awaited to help understand the overburden geology.

I hope this letter clarifies the Department's position on these issues. If you have any questions, you may contact me at (609) 633-1455.

Sincerely,

A handwritten signature in dark ink, appearing to read "E. G. Kaup". The signature is fluid and cursive, with a large initial "E" and a stylized "G".

Edgar G. Kaup, P.E., Case Manager
Bureau of Federal Case Management

kj Enclosure

c: G. Blyskun, BGWPA
J. Josephs, USEPA
J. Prendergast, BEERA
D. Henderson, WSI



State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT

LANCE R. MILLER, DIRECTOR

CN 028

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. P 905-518-356

24 MAY 1991

Cris Anderson, Manager
Environmental Affairs
L.E. Carpenter Company
1301 E. Ninth Street, Suite 3600
Cleveland, OH 44114

Dear Mr. Anderson:

Re: L.E. Carpenter ACO dated September 26, 1986
Extent of Off-site Contaminant Migration

The New Jersey Department of Environmental Protection (Department) considers that there is a strong possibility that contamination from the L.E. Carpenter site has migrated onto adjacent properties and deems that the nature and extent of such contamination must be investigated to a reasonable degree to assure the protection of public welfare and the environment. To this end the Department is requiring that additional monitoring wells be installed on the adjacent properties of Wharton Enterprises, Inc. and Air Products and Chemicals, Inc. (AP).

The location of one of these additional monitoring wells (MW-21) on the property of Wharton Enterprises has been selected and is shown on a modified map labelled AREAS OF CONCERN, dated June 11, 1990. (MW-21 is shown approximately 200 ft. East-Southeast of existing MW-14.)

The location of additional monitoring wells on AP property is not indicated. A well should be located northeast of existing monitoring well MW-13, at a distance sufficient to be in the domain of regional flow.

The Department's reasoning for these additional wells is as follows:

The area east of the LEC buildings 13 and 14 was lowlands prior to the filling-in of the AP property and of the formation of a definite drainage ditch that separate the two properties. This lowland area is evident in 1961 aerial photos of the site; also clearly seen on the photo is the LEC impoundment South-Southeast of the tank farm and a short distance



from the lowlands. It is believed that waste liquids from this impoundment infiltrated into the water table and migrated into the lowlands, under gradients similar to those identified in current hydrogeologic isopliths of the site. It is presumed that, since the clearly-cut ditch did not exist before the AP site was developed, the liquids migrated from the impoundment into the groundwater and in all downgradient directions, i.e., toward the Rockaway River and toward what is now AP property. See RI Shallow Well Map, Figure 16 (June 11, 1990). The mixture of liquid wastes and sludges in the impoundment were identified in 1979-1980 as containing the contaminants predominantly VO's and B/N's but the mixture also contained chlorinated hydrocarbons, small amounts of which were found in samples from MW-13s (on AP property) in 1989-1990.

It is the Department's belief that LEC contaminants migrated to the AP site before the drainage ditch was dug and that the full areal extent of migration of contaminants has not been established. It is also the Department's belief that the ditch is not a fully penetrating hydraulic barrier and that groundwater from LEC can still migrate under it to the AP site. (The RI shallow well Map referenced above corroborates that the groundwater gradient is currently in a southeasterly direction and leads onto AP property.)

Therefore, since the direction of regional groundwater movement on AP property is not confirmed and that the ground water level in MW-13 may only be representative of direction of the subsurface water in the vicinity of the ditch, water level measurements in an additional well on AP's site will help determine direction of shallow groundwater flow.

The Department is also concerned that ground water from MW-13 may not yield samples that are chemically representative of the AP property groundwater; an additional well will help define the areal extent and the nature of off-site contamination.

The Department believes its reasoning is sound and feels it is necessary to investigate further the off-site migration issue in order to complete the RI/FS work.

Please submit, within ten (10) days of receipt of this letter, for the Department's review a map indicating the proposed locations for two additional off-site wells and any others that you feel are justified to round out the study.

The Department wants to remind L.E. Carpenter that the Department expects timely responses to its dated comments and adequate notification of all field activities. Recently the Department received responses two and a half months late with an announcement that associated field work was scheduled for five days hence. The Amended ACO, signed September 26, 1986, II Project Coordination, paragraph 38 states:

"L.E. Carpenter shall notify NJDEP verbally at least two (2) weeks prior to commencement of any field related activities pursuant to this Administrative Consent Order by telephoning...during normal business hours (9:00 a.m. to 5:00 p.m.). A written notification shall follow within five (5) calendar days of the verbal notification."

Please abide by these instructions.

Should you have any questions, you may contact me at (609) 633-1455.

Sincerely,

A handwritten signature in dark ink, appearing to read "E. G. Kaup", with a long horizontal flourish extending to the right.

Edgar G. Kaup, P.E., Case Manager
Bureau of Federal Case Management

kj

c: G. Blyskun, BGWPA
D. Henderson, WSI
J. Prendergast, BEERA
J. Josephs, EPA